General Summary of Key Revisions to Proposed STAR Regulations

From the District's Responses to Comments and suggested revisions to the proposed STAR regulations it will be seen that the key elements of the STAR program have been fully retained. The District suggests that the regulations continue to focus on the same group of chemicals and sources. The District recommends an adjustment of a few months in the proposed timeframes for the submittal of required information and the other key steps in the program (Regulation 1.06, Sections 4 and 5) and that the submission of the information be based on a prospective timeframe. With the exception of a small adjustment in the non-cancer Hazard Quotient (HQ) risk level, the risk levels are recommended to be retained as proposed.

As noted, there are some suggested revisions to the regulations proposed in January 2005. Many of these are very minor and involve slight word changes or similar stylistic or grammatical changes. However, there are a few suggested changes with more significance. Below is a brief, general summary of the more significant suggested changes. For the remainder of the less significant suggested changes, the Response to Comments document should serve as a sound basis of explanation.

I. Primary Proposed Revision

The primary revision to the Proposed STAR regulations is in Regulation 5.21. In the proposed regulations in January 2005, a facility seeking a modification to a goal merely had to demonstrate that it had considered the application of the best methods of reducing its toxic emissions (TBAT). There was no requirement that the facility actually use the best technology.

The District now proposes that Regulation 5.21 be revised to require the use of the best methods available to reduce emissions as a condition to requesting a modification. Sections 2.3.2 and 2.6.2.1

This major, proposed revision would greatly strengthen the effectiveness of the STAR program in bringing about meaningful reductions of the emissions of concern.

II. Additional Supporting Proposed Revisions

Several other suggested revisions are proposed which in various ways aim to achieve more certainty, clarity, flexibility and effectiveness in the program.

A number of these suggested revisions are also in Regulation 5.21 and work in tandem with the major suggested revision discussed above requiring best technology.

The definition of best technology (TBAT) is proposed to be expanded to include equipment maintenance and repair and upset condition prevention measures.

The District proposes to address the issue of providing certainty in being able to operate after best technology is adopted. This issue is addressed in Reg. 5.21 Sections 2.3.3 and provides that if the District determines that the best technology has been applied, then the District will approve the request for a modification, subject to several limitations.

One key limitation is that because the approved level is above a goal, then the owner must re-evaluate, every two to five years, whether there is further TBAT that could be applied. The District would determine the frequency of the re-evaluation. Additionally, apart from that re-evaluation schedule, the District may independently determine that a TBAT element is applicable. In either case, if an element of TBAT is determined to be applicable, the owner would have three years to implement the approach. Sections 2.11 and 2.12.

A related issue is the process and point at which an owner could seek a variance from a District decision on a request for a modification. Under the original proposal, the District would have had no authority to consider a request for a modification where the levels would have been above the cumulative standard for the company (the 7.5 in one million standard). In all such cases, the owner would then have had to seek a variance from the Board.

The District believes that its suggested change will fully maintain the effectiveness of moving companies toward the goals but allow more flexibility about the point at which a variance from the Board must be sought.

The District proposes that there be an upper risk level limit added above the goals beyond which the District may not approve a modification. The

District recommends an upper limit of 100 in a million for carcinogens and a non-cancer Hazard Quotient (HQ) of 3.0. This upper limit will give the District a broader range in which to operate before the Board must grant a variance. Section 2.6.3.

This suggested change does not change any of the goals. Additionally, full public accountability and transparency of the process remain. All such modifications remain fully subject to public notice and comment prior to any emission rate being incorporated into a permit.

Another suggested change necessary to achieve this appropriate outcome is changing the two standards in Sections 2.5.2 and 2.5.3 to goals so that the District can retain the ability to address requests for modifications within the broader risk range discussed above.

It would still be possible for a company to seek a variance from the Board even if the District approved a risk level above the goals but below the 100 in a million level or below the HQ 3.0 level. However, the District believes that the proposed change strikes a very sound balance between where the District's decision-making zone would extend and the point where it is appropriate to have the Board exercise its variance authority.

One additional flexibility measure in Regulation 5.21 is suggested to address points of maximum concentration determined from the required modeling. The District suggests that in Section 2.9 the Board allow for a slightly increased goal when the maximum point of concentration is over an industrial area or a roadway.

The District reasons that exposures at these two types of areas are typically sufficiently limited in time to justify this proposed adjustment. Additionally, other jurisdictions have adopted this limited adjustment approach with no apparent significant decrease in the protection of health. The District suggests that for carcinogens the risk goals be increased by a factor of 10 for roadways and 4.2 for industrial areas and that for non-carcinogens the risk goals be increased by a factor of 3.0.

As an important limitation, the District suggests in Section 2.10 that if the land use ceases to be industrial or roadway, the facility that received approval for an adjusted goal in Section 2.9 must effectively redo its modeling assessment.

Also, the District suggests in the former 2.3.3 and in 2.6.2.2 that the evaluation of the consequential effect of current and future land use and demographic factors on a request for modification be at the point of a request to exceed the goals in Section 2.5.2 but would not be evaluated to exceed the goals in 2.2. Keeping in mind that a request for a modification would have to be accompanied by a demonstration of the use of best technology, the District reasons that the more efficient and effective use of resources in evaluating the land use and demographic factors would be at the point where a modification seeks to go above the 2.5 goals.

III. Other Recommended Changes

For the remainder of the suggested changes this summary will go through the regulations sequentially.

Regulation 1.02--Definitions

The definitions section has two main suggested changes to note. First, for the definition of "excess emissions" the District recommends that the definition be focused on where the emissions exceed an applicable emission standard. The proposed regulation had sought to establish a mechanism to have an excess emission for toxics prior to there being an applicable emission rate. The District suggests that tailoring excess emissions to where there is an applicable emission standard will make the applicable regulations more certain and more enforceable. For most toxics, an applicable emission standard will likely be established within the first three years of the program and will become an enforceable requirement of the company's permit.

Also, the District recommends revising the definition of "malfunction" to be closer to the federal and state definition. The District also proposes two new definitions, "upset conditions" and "preventable upset conditions." There would be the overarching concept of "upset conditions" with two subsets; one as preventable upset conditions and the other as unpreventable upset conditions, which effectively becomes the malfunction category. This approach helps retain a definitional approach generally consistent with federal and state law and adds some helpful flexibility into this area when an excess emissions violation is being evaluated for enforcement purposes.

Regulation 1.06—Enhanced Emissions Information

The District proposes to extend the exemption contained in the proposed regulation for motor vehicle fueling and refueling of gasoline and diesel to any source that has that activity. The District reasons that emissions from these activities will be addressed in the Report and Plan of Action to be developed for other source sectors and emissions under Regulation 5.30. So, these emissions will be addressed and on approximately the same timeframe overall.

Also in Regulation 1.06 Section 3.11, only companies that actually reported emissions of Category 2 chemicals to EPA for the 2002 Toxic Release Inventory program would need to report, model, etc. As the Category 2 chemicals were set out, specifically based on reported releases of those chemicals to EPA, the District reasons that the application of the program is more appropriate for those sources which reported releases of those chemicals.

The District has determined that the use of the concept of "uncontrolled emissions" has sufficiently little consequence to the operation of the proposed regulatory processes and mechanisms that it is more appropriate to delete the term and the use of the term. The more consequential terms for the operation of the models and determining probable levels of emissions are "allowed" or "allowable emissions".

Additionally, the District suggests revising the program to focus on annual, average emissions, in most cases, as this is the more consequential timeframe for emissions. Thus, the District suggests reducing the need for the submittal of emissions information at the hourly and daily maximum and average rates. The District will be able to calculate any necessary daily and hourly average emission rates from the annual emissions and annual hours of operation information which would be submitted.

Regulation 1.07—Excess Emissions

In the area of excess emissions the District has recommended that facilities be provided some additional operational flexibility to determine whether and to what extent they reduce or terminate their operations to reduce or prevent excess emissions. The goal remains unchanged to reduce or prevent the

excess emissions, but the facilities would have greater discretion to decide how much to scale back operations. The District further reasons that in some cases excess emissions can be effectively reduced or ended without terminating operations and the facilities should appropriately have some discretion to best determine how much reduction of operations are necessary.

Regulation 1.21—Leak Detection and Repair

The District recommends that this regulation be pulled from the package at this time with additional review and resubmission at a later date. The District reasons that further review is warranted and that such review should not hold up the rest of the STAR program.

Regulation 2.08—Fees

The District will propose program fees for the STAR program in the near future.

Regulation 5.01—General Provisions

The Districts proposes to clarify that the various exemptions apply to the Group 2 sources as well as the Group 1 sources.

Regulation 5.20—Methodologies

In Section 3.3.4.1 the District proposes to add EPA's most recent March 2005 Guidelines for Risk Assessment and Supplemental Guidelines for Early Life Exposure as additional authoritative sources to determine a unit risk estimate in certain cases. These are appropriate additions consistent with the currently identified sources.

To be consistent with the basis of the non-cancer risk numbers for EPA and California the District suggests that most averaging times, as set forth in Section 4, be annual averaging times.

The District proposes, in Section 5, that the establishment of an acute risk effect benchmark ambient concentration be consistent with the most recent EPA methodology. This adds clarity and certainty to how the District would determine acute effects.

Regulation 5.21—Environmental Acceptability

The District proposes that January 14, 2005 be established as the date before and after which applicability of the STAR program to submitted permit applications be determined. Section 1.6.2.

The District proposes to establish the Hazard Quotient goals in Sections 2.2 and 2.5 at 1.0. This is the level generally accepted as the point above which adverse health effects could occur. Public health is effectively protected at an HQ of 1.0.

EPA has recently created a new, online, searchable database to find and evaluate, for suitability, control technologies for hazardous air pollutants. In Sections 2.3.2 and 2.6.2.1 the District recommends that any source seeking a modification of a risk goal be required to demonstrate that it has reviewed and considered the information from this database.

Regulation 5.22—Procedures

In Section 5.1.2 the District recommends the use of 5 years of meteorological data with the maximum concentration to be calculated from the arithmetic mean of the five maximum concentrations and with the location of the maximum to be the location associated with the highest of the five individual maximum concentrations. The District reasons that this approach is appropriately representative of the necessary input data for the modeling and protection of human health.

Regulation 5.23—Categories of Contaminants

The District, in Section 6.3, clarifies that chromium emissions may be speciated by oxidation state and that if the chromium is not speciated the hexavalent state is to be assumed.

Regulation 5.30—Other Sources

The District proposes that the date for the required Report and Plan of Action to the Board to address toxic emissions from other sources be extended from June 2006 to June 2007 to enable the District to research and develop a more complete and thorough Report and Plan.